

REMARKS

Claims 1-6 are currently pending. In the Office Action of September 10, 2007, the Examiner again rejected claim 1-6 on the same grounds first set forth in the Office Action of April 5, 2007. Specifically, claims 1 to 3 stand rejected as obvious under 35 U.S.C. § 103 in view of U.S. Publication No. 2002/0142195 (Ehara et al.) and U.S. Publication No. 2003/0180582 (Masumoto et al.). Claims 4 to 6 stand rejected as obvious under 35 U.S.C. § 103 in view of Ehara et al. and Masumoto et al. and further in view of U.S. Publication No. 2003/0124420 (Fong et al.). In again rejecting claims 1-6 based on the same prior art, the Examiner has found unpersuasive the amendments and remarks as set forth in Applicant's response of January 10, 2007. In the prior response, Applicant amended independent claim 1 to clarify that "the heat protecting element is spaced from a surface of the battery cell, said space being filled with resin of the resin mold section." The current Office Action maintains that claim 1 as previously amended is still rendered obvious by the cited prior art. For the reasons, set forth below Applicant respectfully requests that the Examiner reconsider the rejection of claims 1-6.

As correctly noted in the Office Action, Masumoto et al. discloses that there is a cavity within the cover, similar to the cavity of Ehara et al. As shown in Figs. 6A, 6B, 13 and 16 of Masumoto et al., that cavity is filled by insulating resin. See also paragraphs [0068] and [0085] Masumoto et al. However, that disclosure does not render obvious claim 1 which recites in part "a resin mold section which covers and fixes the circuit base board, the connecting members, and the heat protecting element to the battery cell, wherein the heat protecting element is spaced from a surface of the battery cell said space being filled with a resin of the resin mold section," or any of its dependent claims. FIGS. 3B and 6B of Masumoto et al. illustrate that an upper surface of a positive temperature coefficient (PTC) element (110) is covered by a resin, and a lower surface

facing a battery cell partly makes contact with an insulation sheet (21). That is, a space exists beneath the rest of the lower surface of the PTC (110). See Figure 6A reproduced below. FIGS. 13 and 16 of Masumoto et al. illustrate the similar configuration having a space beneath a temperature fuse (10). See Figure 13 reproduced below.

Fig. 6A

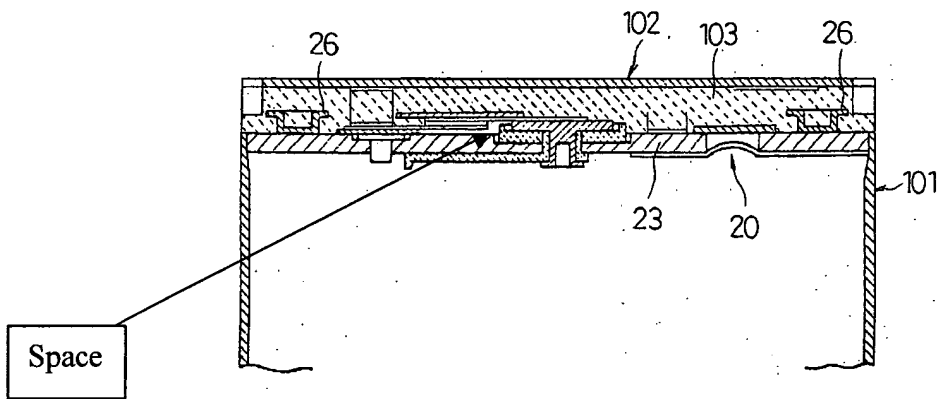
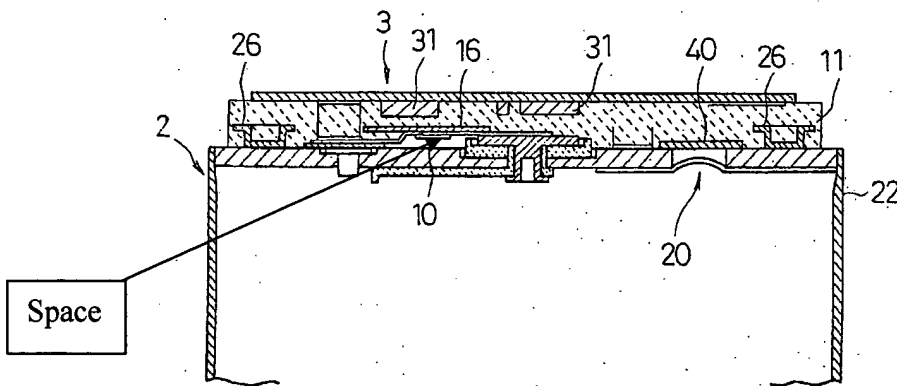


Fig. 13



As further explained in Masumoto et al., a heat insulation sheet (16) is disposed to prevent the battery cell from being damaged by heat discharged from the resin injected to form a

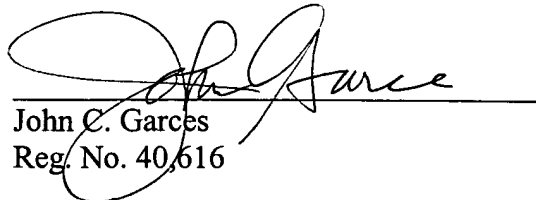
resin mold package (103). ("A heat insulation sheet 16 is placed upon the PTC element 110 in order to prevent heat deterioration thereof during the resin filling and molding processes which will be described later." Masumoto et al. at par. [0065]). From the viewpoint of preventing thermal damage, it is apparent that the resin must not be filled in this space between the PTC element (110) and the temperature fuse (10) as illustrated in FIGS. 6A, 6B, 13, and 16. This is in contrast to claim 1 requiring the heat protecting element be spaced from a surface of the battery cell and that the space is filled with a resin of the resin mold section. Ehara et al is equally unavailing here as it teaches a space that is necessary for the electrical elements that are located inside the cover 41. See Applicant's prior Response to Office Action. Thus, a configuration of Masumoto et al. alone or in combination with Ehara et al. cannot obtain superior effect of the present invention that allows a heat insulation element to be activated reliably due to heat insulation **provided by the resin mold filled between the heat insulation element and the battery cell.** (Fong, which has not been applied to claim 1 is equally unavailing). In other words, the claimed invention obtains an unobvious advantage in that the resin filling the space from the surface of the battery cell insulates the heat protecting element. The result is a heat protecting element which results in a safer and more reliable battery

Accordingly, a person of ordinary skill in the art would not have been motivated to combine Ehara et al. disclosing the battery pack structure necessitating a space in the cover and Masumoto et al. disclosing a resin injection method, which cannot eliminate a space between the thermal fuse and the battery 2. For those reasons, claim 1 and dependent claims 2-6 are allowable over the cited prior art.

The Examiner is urged to telephone Applicant's undersigned counsel at the number noted below if it will advance the prosecution of this application, or with any suggestion to resolve any condition that would impede allowance. In the event that any extension of time is required, Applicant petitions for that extension of time required to make this response timely. Kindly charge any additional fee, or credit any surplus, to Deposit Account No. 50-0675, Order No. 848075-0055.

Respectfully submitted,

Date: December 10, 2007
New York, New York


John C. Garces
Reg. No. 40,616

Schulte Roth & Zabel, LLP
919 Third Avenue
New York, NY 10022

CERTIFICATE OF MAILING

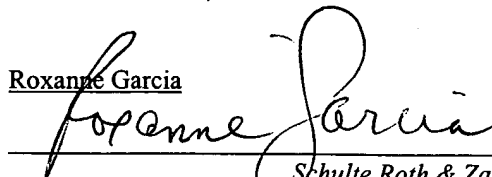
Date of Deposit: December 10, 2007

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